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U. S. PATENT & TRADEMARK OFFICE 845

751 CTGCCAGTGGCCCTGCGGGGACCCGACTCAGTGTGAGCCTCACCTTCCGCAGCTTTGACCTTGCGGTCCCTG  
 C Q W A L R G D A D S V L T F R S F D L A S C 268  
 826 CGACGAGGGCGGGCAGCGACCTGGTGTACAACACCCCTGAGCCCCATGGAGCCCCACGCCCTGGTGGAGCTT  
 D E R G S D L V T V Y N T L S P M E P H A L V Q L 293  
 901 GTGTGGCACCTACCCCTCCCTACAAACCTGACCTTCCACTCCTCCAGAACGTCCTGCTCATCACACTGATAAC  
 C G T Y P P S Y N L T F H S S Q N V L L I T L I T 318  
 976 CAAACACTGAGGGGGCATCCCCGGCTTGAGGCCACCTTCCAGCTGCCTAGGATGAGCAGCTGTGGAGGGCG  
 N T E F F H P G F E A T F F Q L P R M S S C G G R 343  
 1051 CTTACGTAAGGCCAGGGACATTCAACAGCCCCACTACCCAGGCCACTACCCAGGCCACTACCCACCCAAACATTGACTGCACATG  
 L R K A Q G T F N S P Y P G H Y P P N I D C T W 368  
 1126 GAACATTGAGGTGCCAACACAGCATGTGAAGGGTICAAATTCTTCTACCTTCTACCTGCTGGAGCCCCGGGTGCC  
 N I E V P N N Q H V K V S F K F Y L L E P G V P 393  
 1201 TGCGGGCACCTGCCAACGGACTACGTGGAGATCAATGGGAGAAATACTGGGAGAGGGTCCAGCTGTGCGT  
 A G T C P K D Y V E I N G E K Y C G E R S Q F V V 418  
 1276 CACCAAGCAACAGAACAGATCACAGTTCCACTCAGATCAGTCCCTACACCGACACCGGCTTCTTAGCTGA  
 T S N S N K I T V R F H S D Q S Y T D T G F L A E 443  
 1351 ATACCTCTCCTACGACTCCAGTGAACCCATGCCGGGGCAGTTCACTGCGGCACGGGGGGTGTATCCGGAAGGA  
 Y L S Y D S S D P C P G Q F T C R T G R C I R K E 468  
 1426 GCTGGCTGTGATGGCTGGCCGACTGCACCGGACCACTGGCAGTTCAACTGGCAGGTGAGGCTCAACTGGCAGTTGC  
 L R C D G W A D C T D H S D E L N C S C D A G H Q 493

Fig. 2B

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1501 GTTCACGTGCAAGAACAAAGTCTGCAAGCCCCCTTCTGGGTCTGGGAGACAGTGTGAACAGACTGGCTCTGGGAGACAAACAG  
 F T C K N K F C K P L F W V C D S V N D C G D N S 518  
 1576 CGACGAGGGTGCAGTTGTCGGCCAGACCTTCAGGTGTTCCAAATGGAAAGTGCCTCTCGAAAAGGCCAGCA  
 D E Q G C S C P A Q T F R C S N G K C L S K S Q Q 543  
 1651 GTGCAATGGAAGGACGACTGTGGGACGGGCTCTGCCCAAGGTGAACCGTGTCACTTGTAC  
 C N G K D D C G D S D E A S C P K V N V V T C T 568  
 1726 CAAACACACTAACCGCTGCTCAATGGCTCTGCTTGAGCAAGGGCAACCCCTGAGTGTGACGGGAAGGGGACTG  
 K H T Y R C L N G L C L S K G N P E C D G K E D C 593  
 1801 TAGCGACGGCTCAGATGAGAAGGACTGGGACTGTGGCTGGGTCACTCACGAGACAGGCTCGTGTGGGG  
 S D G S D E K D C D C G L R S F T R Q A R V V G G 618  
 1876 CACGGATGGGATGAGGGAGTGGGGAGTGGCCCTGGCAGGTAAGCCTGCATGCTCTGGGCCAGGGCACATCTGGGTGC  
 T D A D E G E W P W Q V S L H A L G Q G H I C G A 643  
 1951 TTCCCTCATCTCTCCAAACTGGCTCTGGTCTCTGGGCTTGCACGACACTGCTACATCGATGACAGAGGATTCAAGGTACTCAGA  
 S L I S P N W L V S A A H C Y I D D R G F R Y S D 668  
 2026 CCCACGGCAGTGGACGGCCTTCCCTGGGCTTGCACGACAGGCCAGGGCAGGGCCCTGGGGTGCAGGAGGGCAG  
 P T Q W T A F L G L H D Q S Q R S A P G V Q E R R 693  
 2101 GCTCAAGGGCATCATCTCCACCCCTTCTCAATGACTTCACCTTGACTATGACATGGGCTGCTGGAGGTGGA  
 L K R I I S H P F N D F T F D Y D I A L L E L E 718  
 2176 GAAACCGGAGACTACAGCTCCATGGTGGGCCATCTGGCTTCCCCTGCTGGGGCAA  
 K P A E Y S S M V R P I C L P D A S H V F P A G K 743

Fig. 2C

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2251 GGCCATCTGGTCA CGGGCACACCCAGTATGGAGGC ACTGGCGGCTGATCCTGCAAAAGGGT GAGAT  
 A I W V T G W G H T Q Y G G T G A L I L Q K G E I 768  
 2326 CCGCGTCA ACCAGACCCTGCCAGAAACTCCTGCCAGCATCAGCCCGCGCATGATGTCGGCTT  
 R V I N Q T T C E N L L P Q I T P R M M C V G F 793  
 2401 CCTCAGCGGGCGTGGACTCCTGCCAGGGT GATTCCGGGACCCCTGTCCAGCGTGGAGGGGATGGGGAT  
 L S G G V D S C Q G D S G G P L S S V E A D G R I 818  
 2476 CTTCCAGGGCCGGTGTGGTGGAGACGGCTGGCTCAGAGGAACAAGCCAGGGTGTACACAAGGCTCCC  
 F Q A F C C S W G D G C A Q R N K P G V Y T R L P 843  
 2551 TCTGTTGGGACTGGATCAAAGAGAACACTGGGTATAGGGGTAGGGCCACCCAAATGTGTACACCTGGGGG  
 L F R D W I K E N T G V (SEQ ID NO: 2) 855  
 2626 CCACCCATCGTCCACCCCAAGTGTGCA CGGCC TGCAGGGCTCCAAATCTCCAGGGCTCCTAGCTCAGCCTCCAAAGTGC  
 2701 CATAACACTGTGA ACTCAATCTCCAGGGCTCCTAGAA AACCTCTCGCTTCTCGCTTCTCAGCCTCCAAAGTGC  
 2776 AGCTGGGAGGTAGAAGGGAGACACTGGTGGTTCTACTGACCCAAACTGGGGCAAAGGTTTGAAAGACACAGCCT  
 2851 CCCCCGCCAGCCCCAAGCTGGCCGGCGCTTGTGTATATCTGCTCTCCCTGTCTGTAAAGGGAGCAGGGAA  
 2926 CGGAGCTCGGAGCCTCCTAGTGAAGGGTGGGGGTGCCGATCTGGGCTGGCCACGGCTGGCCACGGCTCT  
 3001 TGAGGAAGCCCAGGGCTCGGAGGCCCTGGAAACAGACGGTCTGAGACTGAAATTGTGTTACCAAGCTCCAGGG  
 3076 TGGACTTCAGTGTGTATTGTGTAAATGGTAAACAATTATTCTTTAAAAAAA  
 (SEQ ID NO: 1)

- \_\_\_\_ : KOZAK'S CONSENSUS SEQUENCE
- \_\_\_\_ : TRANSMEMBRANE DOMAIN
- \_\_\_\_ : CONSERVED AMINO ACIDS OF CATALYTIC TRIAD H, D, S

Fig. 2D

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